

Contents

1 Routine/Function Prologues	2
1.1 Fortran: Module Interface obsprecipforcing_module.F90 (Source File: obs- precipforcing_module.F90)	2
1.1.1 LIS_obsprecipforcing_init (Source File: obsprecipforcing_module.F90)	2
1.1.2 LIS_get_obsprecip_forcing (Source File: obsprecipforcing_module.F90)	2
1.1.3 precip_forcing_init (Source File: obsprecipforcing_module.F90) . . .	2
1.1.4 get_precip_forcing (Source File: obsprecipforcing_module.F90) . . .	3
1.1.5 scatter_precip_data (Source File: obsprecipforcing_module.F90) . . .	4

1 Routine/Function Prologues

1.1 Fortran: Module Interface *obsprecipforcing_module.F90* (Source File: *obsprecipforcing_module.F90*)

This module contains interfaces and subroutines that controls the incorporation of observed precipitation forcing

REVISION HISTORY:

14Nov02 Sujay Kumar Initial Specification

INTERFACE:

```
module obsprecipforcing_module
```

ARGUMENTS:

```
real, pointer :: obsprecip(:)
```

1.1.1 LIS_obsprecipforcing_init (Source File: *obsprecipforcing_module.F90*)

INTERFACE:

```
interface LIS_obsprecipforcing_init
    module procedure precip_forcing_init
end interface
```

1.1.2 LIS_get_obsprecip_forcing (Source File: *obsprecipforcing_module.F90*)

INTERFACE:

```
interface LIS_get_obsprecip_forcing
    module procedure get_obsprecip_forcing
end interface
```

1.1.3 precip_forcing_init (Source File: *obsprecipforcing_module.F90*)

Initializes the variables required for the spatial interpolation of observed precipitation data

INTERFACE:

```
subroutine precip_forcing_init()
```

USES:

```

use lisdrv_module, only :lis
use def_ipMod, only : allocate_ip, def_ip_input
use precipforcing_pluginMod, only : precipforcing_plugin
use spmdMod, only : masterproc

```

CONTENTS:

```

if(lis%f%gpcpsrc.gt.0) then
    call precipforcing_plugin
    if(masterproc) then
        call defnatrespcp(lis%f%gpcpsrc)
        allocate(obsprecip(lis%d%ngrid))
    endif
endif

```

1.1.4 get_precip_forcing (Source File: *obsprecipforcing_module.F90*)

Calls the routines to open, read, and interpolate observed precipitation forcing data

INTERFACE:

```
subroutine get_obsprecip_forcing
```

USES:

```

use lisdrv_module, only: lis, gindex
use grid_spmdMod

```

CONTENTS:

```

if(lis%f%gpcpsrc.gt.0) then
    if(masterproc) then
        call glbpPrecip(lis%f%gpcpsrc)
    endif
    if(lis%f%findtime1 ==1 .or. &
       lis%f%findtime2==1) then
        if(npes > 1) then
            call scatter_precip_data()
        endif
        call timeinterppcp(lis%f%gpcpsrc)
    endif
endif

```

1.1.5 scatter_precip_data (Source File: *obsprecipforcing_module.F90*)

Distributes the precipitation forcing data onto the compute nodes

INTERFACE:

```
subroutine scatter_precip_data()
```

USES:

```
use grid_spmdMod
```